

REMARKS

Claims 1-19 are pending in the present application. Claim 1 is amended above. No new matter is added by the claim amendments. Entry is respectfully requested.

The Applicants note that the Office Action Summary does not indicate whether the drawings filed in the application are acceptable. Confirmation of their acceptability is respectfully requested.

The Applicants note, with appreciation, that the Office Action indicates at page 3, paragraph 3, that claims 10-19 are allowed.

Claims 1-9 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Pradeep, *et al.* (U.S. Patent Number 6,921,904). Reconsideration of the rejection and allowance of claims 1-9 are respectfully requested.

In the present invention as claimed in independent claim 1, a method of manufacturing a multi-thickness gate dielectric layer of a semiconductor device includes “forming a first dielectric layer on a semiconductor substrate”, “forming a second dielectric layer on the first dielectric layer, the second dielectric layer having a different dielectric material from that of the first dielectric layer”, and further “selectively removing a portion of the second dielectric layer with etch selectivity to the first dielectric so as to selectively expose a portion of the first dielectric layer under the second dielectric layer”.

Pradeep, *et al.* is cited in the Office Action as disclosing a method for forming a device having multiple-thickness gate dielectric layers. In Pradeep, *et al.*, a single thick layer 18 of gate oxide is formed on a substrate 10. A photoresist mask 20 is formed over a portion of the surface of layer 18 in order to reduce the thickness of the layer 18 in a region of the device where a thin layer of gate oxide is desired, creating two regions with different thicknesses in layer 18. The thin region of layer 18 is thus formed as a result of an etching process, and the resulting thickness

of the thin region of layer 18 is determined according to the degree of etch (see Pradeep, *et al.* column 4, lines 8-26).

Pradeep, *et al.* fails to teach or suggest “forming a second dielectric layer on” a “first dielectric layer, the second dielectric layer having a different dielectric material from that of the first dielectric layer”, as claimed in claim 1 of the present invention. Instead, in Pradeep, *et al.*, a single dielectric layer 18 is applied, and a portion of it is etched in one region to form two regions having different thicknesses. Pradeep, *et al.* further fails to teach or suggest selectively removing a portion of the second dielectric layer “with etch selectivity to the first dielectric layer” so as to selectively expose a portion of the first dielectric layer under the second dielectric layer, as claimed in claim 1 of the present invention. In Pradeep, *et al.*, the thin and thick regions of the dielectric layer 18 are formed of the same material, as they are the same layer. Therefore, when the thin portion is formed by etching in Pradeep, *et al.*, it is not removed “selectively” with “etch selectivity to the first dielectric layer”, as claimed in claim 1 of the present invention.

Pradeep, *et al.* in no way explicitly or impliedly teach or suggest that the single dielectric layer 18 could be formed as a combination of layers of different materials, as asserted in the Office Action. Instead, Pradeep, *et al.* simply teach that a single, thick, layer is applied, and a first region partially etched, to form two regions of different thicknesses. The Applicants therefore submit that improper use of hindsight analysis has been applied in the assertion made by the Office Action to formulate the rejection.

It is therefore submitted that independent claim 1 is allowable over Pradeep, *et al.* Reconsideration of the rejection of claim 1 under 35 U.S.C. 103(a) as being unpatentable over Pradeep, *et al.*, and allowance of the claim, are respectfully requested. With regard to the rejection of dependent claims 2-9 as being unpatentable over Pradeep, *et al.*, it follows that these claims should inherit the allowability of the independent claim from which they depend.

Closing Remarks


It is submitted that all claims are in condition for allowance, and such allowance is respectfully requested. If prosecution of the application can be expedited by a telephone conference, the Examiner is invited to call the undersigned at the number given below.

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Respectfully submitted,



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